

# APPENDIX

**Goodhue County  
Local Water Management Plan**

**Priority Concerns Scoping Document**

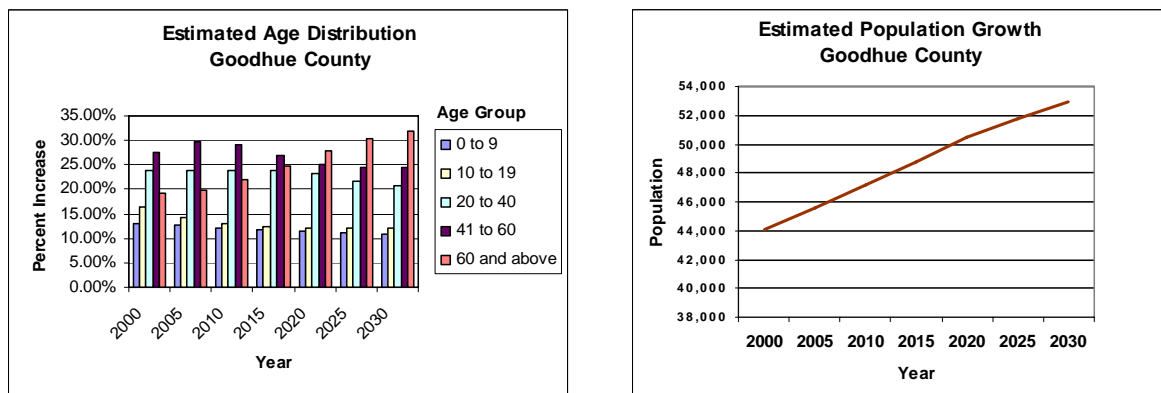
**August 2004**

The following priority scoping document for the Goodhue County Water Management Plan was developed in accordance with the changes to the Comprehensive Local Water Management Act; Statutes: 103B.304 – 103B.355. This scoping document lists the priority concerns the Goodhue County Water Management Task Force has chosen along with a detailed account of how these concerns were identified and chosen.

## INTRODUCTION OF THE COUNTY OF GOODHUE

Goodhue County is located in Southeastern Minnesota, approximately 40 miles southeast of the Twin Cities and 60 miles northwest of Winona. (See attached map). The county seat is located in Red Wing which is the largest city in the County of Goodhue with a population of 15,854. Surrounding counties include; Dakota County to the north, Wabasha County to the south and east, Dodge and Olmsted Counties to the south, and Rice County to the west. The Mississippi River and its enlargement, Lake Pepin, form its northeastern border and separate it from the State of Wisconsin. The county has an area of 764 square miles with a total of 438,454 acres of rural land with an average of 51 people per square mile. Goodhue County has 10 cities with 21 organized townships.

Population trends of the county are described in the graphs below:



Source: Goodhue County Planning and Zoning

The estimated population of Goodhue County in the year 2030 is 52,890. As portrayed in the graph above, the population will be made up mostly of the elderly age group if trends stay the same. This information is pertinent to the water plan due to the varying views of dissimilar age groups. The elderly outlook of the county's natural resources will be much different from the views of the younger generations. This observation will play a role with water resource decision making in the future.

## PHYSICAL FEATURES OF THE COUNTY

The surface of Goodhue County is mostly gently rolling prairie, but it changes to a deeply incised bluff contour along streams and rivers, especially towards the Mississippi. Elevations throughout the county vary from 1,250 feet at Kenyon to 665 feet at Lake Pepin. The chief tributary streams of the Mississippi River in this county include: the Cannon River with its southern arm the Little Cannon; Prairie Creek, and Belle Creek;

and the North Fork, North Branch and Middle Branch of the Zumbro River. Spring, Hay, Bullard's, and Wells Creeks, are not large streams, but are important features in forming the topography of the county and empty directly into the Mississippi. Besides these streams, the Vermillion River, to the north, separates Prairie Island from the main land. A prominent feature of the landscape in this region is Barn Bluff which is close to the Mississippi River at Red Wing. The name is a translation of "La Grange: a designation given by the French because of its appearance. The promontory is a lone, high, and nearly level-crested bluff which is quite separated from the side bluffs of the valley and conspicuously seen for many miles up and down the river.

## **PRIORITY CONCERNS HISTORY**

The Goodhue County Local Water Management planning process addressed the priority concerns by following these steps:

- ❖ April 9<sup>th</sup>, 2001: Goodhue County Local Water Plan Policy Meeting at SWCD office in Goodhue. Collected survey from county citizens regarding their water management concerns.
- ❖ October 2<sup>nd</sup>, 2001: Board of Commissioners adopted a resolution to update the Goodhue County Local Comprehensive Water Management Plan for the years 2003 to 2008.
- ❖ January 18<sup>th</sup>, 2002: Policy Committee met to discuss general entities of the update. The committee brain stormed on what issues they thought were important, along with the frame work on how to complete the updated plan.
- ❖ November 21<sup>st</sup>, 2002: Joint Water Planning Meeting at Zumbro City Hall. BWSR granted Goodhue County with a two year extension on updating the water plan and is now due December 31<sup>st</sup>, 2004. Also at this meeting priority concerns were ranked in order of importance by the Technical and Policy Committee members:

- 1. Erosion Control and Stormwater Quality and Quantity**
- 2. Land Use/Open Space Planning and Management**
- 3. Feedlots**
- 4. Nutrient and Pest Management**
5. *Wetlands*
6. *Public/Private Wells*
7. *Sewage and Wastewater Treatment*
8. *Solid Waste Management*
9. *Floodplains and Shoreland Management*

*-Italics concerns did not receive the amount of votes that the top 4 did. These items were still recognized as concerns during the scoping document decision making.*

- ❖ February 24<sup>th</sup>, 2003: Joint Water Planning Meeting at Zumbro City Hall. Dave Morrison presented information on Erosion Control.
- ❖ July 21<sup>st</sup>, 2004: Technical Water Plan Committee Meeting at Goodhue SWCD office. Reviewed Feedlot, Nutrient Pest Management and Land Use/Open Space concerns.
- ❖ August 3<sup>rd</sup>, 2004: Technical Water Plan Committee at Goodhue SWCD. Reviewed and finalized priority concern drafts for the scoping document.
- ❖ August 11<sup>th</sup>, 2004: Policy Committee met at Goodhue SWCD to review the priority concern drafts. A few minor additions were made and were able to continue to develop the scoping document
- ❖ August 23<sup>rd</sup>, 2004: Policy Committee Meeting at Goodhue SWCD reviewed the finalized Scoping Document draft. Minor word changes were made.
- ❖ September 7<sup>th</sup>, 2004: County Board Meeting at Goodhue County Courthouse, Red Wing. The County Commissioners approved the Scoping Document at their board meeting.

(The lists of attendees at the meetings are attached at the end of the document.)

The Goodhue County Local Water Management Plan process of addressing priority concerns considered a variety of inputs. The timeline above describes the history of the process. Citizens input along with the concerns from the technical and policy committees, was the framework to the priority concerns addressed. The state agencies inputs reflect the majority of the concerns from the committee's ideas and the citizen's survey. The priority concerns were discussed with the state agency's representatives at the technical committee meetings. The committee members, along with the state agencies, attempted to find common ground between the priority concerns. It was found by the policy and the technical committee members that some of the state agencies concerns were already being addressed and/or not feasible for this updated version of the water plan. These issues are still recognized and are listed towards the end of the state agencies priority concern section. Also, the County's Comprehensive Plan update recognizes the county's water plan. An effort was made to integrate the Water Plan update to agree with the entities of the County's Comprehensive Plan.

## **PRIORITY CONCERNS FOR THE GOODHUE COUNTY LOCAL WATER MANAGEMENT PLAN UPDATE**

### **Erosion Control and Stormwater Quality and Quantity**

#### **❖ General Principles**

- Continue to use Best Management Practices increase water retention during peak runoff events
  - Cover crops
  - No till
  - Crop Residue Management
  - Buffers

- Wetland management and preservation
- Rain gardens
- Small culvert approach
- Ponding areas and drainage courses are to be preserved and stormwater runoff from new development will be required to be controlled.
- Stay informed with Total Maximum Daily Load (TMDL) projects as they develop.
  - Participate in studies and decision making processes
- Balance economic development with our natural resources

#### ❖ **Urban Stormwater Management**

- Increase standards for stormwater management on bluff land and ridge land development
- With the MPCA's additional stormwater permits, improved enforcement will be needed. SWCD and/or Goodhue County Planning and Zoning can monitor and inspect construction sites.
- Increase erosion control standards near scenic and recreational areas.
- Maintain existing erosion control structures.
- Encourage towns/cities to participate with the Minnesota League of Cities, Minnesota Erosion Control Association and the MPCA to develop model ordinances for erosion and sediment control.

#### ❖ **Erosion Control from Rural Development**

- Facilitate rural communities in developing small scale watershed maps.
  - Gives a better understanding of stormwater runoff and plat approval decisions.
- Continue with Non-point Education for Municipal Officials (NEMO) project throughout the county.
- Pass permit fees from the developers to the future land owners.

#### ❖ **Erosion Control from Agriculture**

- Encourage the use of cover crops
- Minimize shore impact zone by exercising the 50 foot buffer rule on agricultural lands
- Utilize Farm Bill programs to help offset costs.
- Feedlots that are Confined Animal Feedlot Operation (CAFO) are covered under the General National Pollutant Discharge Elimination System (NPDES) permits
  - Feedlots that are non- CAFO's are required to follow BMP's)

## **Landuse and Open Space**

- ❖ Support the efficient , orderly economic growth of cities by encouraging development within the cities
- ❖ Encourage the containment of growth of housing developments to be within existing urban areas.
- ❖ Enhance all natural riparian corridors
- ❖ Preservation of our natural resources
  - Bluff lands
  - Wetlands
  - Streams/Rivers
  - Forests
- ❖ Discourage any development on critical areas
  - Decorah edge
  - Bluff land areas
  - Rare and endangered natural resource sites
- ❖ Identify critical areas for recharge, sink holes and fault lines and protect these areas from land uses that could adversely affect water quality
- ❖ Utilize sensitive area information to minimize the cumulative effects on watersheds
  - Use the Natural Resource Inventory, County Biological Survey and the Geologic Atlas when making decisions
- ❖ Ponding areas and drainage courses are to be preserved and stormwater runoff from new development will be required to be controlled.
- ❖ Promote the aesthetic value of bluff land area

## **Nutrient and Pest Management**

- ❖ Discourage anhydrous application during fall months
- ❖ Application records for all producers are encouraged.
  - Application records are the basis from which a nutrient management plan can develop.
- ❖ Generally larger farms maintain their nutrient management plans. Concentrate efforts towards managing small farms with all sources of fertilizer; manure, legume credits, and commercial fertilizer.
- ❖ Provide a baseline for water quality standards such as:
  - Nitrates in groundwater
  - Pollutant probability map
- ❖ Target suburban and rural audiences for alternate methods of fertilizing yards.
- ❖ Provide one-on-one assistance to address nutrient management issues.
  - Help write and manage nutrient management plans
  - Nutrient management plans are a work in progress they need to be continually updated to be an effective tool.

- ❖ Produce data layers, in GIS format, on locations where manure is being applied
  - Educate farmers on where to apply
  - Prevent application overlapping
  - Avoid application on sensitive areas.
- ❖ Prevent the loss of pastured areas in the county to help with erosion issues.
  - The decline of medium sized dairy farms is leading to the increased production of row cropping.
  - Promote forage based agriculture through education and grant proposals.
    - Rotational grazing systems
- ❖ Educate farmers on steep slope manure application.
- ❖ Encourage incorporation of manure whenever possible
- ❖ Utilize the University of Minnesota as an educational tool when assessing and recommending nutrient management plans

### **Feedlots**

- ❖ Prevent runoff from feedlots. This concern is watershed specific and should target priority areas:
  - Karst areas
  - impaired watersheds
  - riparian areas
  - shore-land area
- ❖ Provide financial assistance to achieve feedlot compliance.
  - High market approach
    - Grants, cost shares, etc.
- ❖ Provide technical assistance to all farmers not just those receiving cost-share for low-cost non-engineered fixes.
  - Use Feedlot Evaluation Model (FLEVAL) to meet requirements for open lot agreements
- ❖ Provide adequate staffing to assist in achieving feedlot compliance



## **STATE AGENCIES PRIORITY CONCERNS**

### **Board of Water and Soil Resources - Mary Kells**

#### **1. Maintain, enhance and increase wetland resources and natural corridors in the county.**

- ❖ Wetland serve a wide range of functions:
  - Flood control
  - Water purification
  - Filtering pollutants
  - Reduces sedimentation
  - Controls erosion
  - Provides habitat for plants and animals
- ❖ Wetland concern fulfills the county's recently adopted wetland ordinance to replace all degraded or lost wetlands with in the county.
- ❖ Complete a drained wetland inventory
- ❖ Identify high priority areas for wetland restoration and enhancement
- ❖ Inventory remaining wetlands and prioritize them according to function and value.
- ❖ Promote Reinvest In Minnesota (RIM), Wetland Reserve Program (WRP), Conservation Reserve Enhancement Program (CREP), Works Progress Administration (WPR) and Wetland Banking Programs
- ❖ Give landowners incentive to preserve high priority wetlands through Wetland Preservation Areas Program.
- ❖ Enhance natural corridors in county.

#### **2. Increases in urban stormwater runoff and erosion from development and construction sites.**

- ❖ Develop countywide standards for stormwater management and construction site erosion/sedimentation.
- ❖ Provide incorporated cities with information concerning these county wide standards; provide LGU with educational opportunities to learn more about erosion control regulations and techniques through Minnesota Pollution Control Agency (MPCA) and MN Erosion Control Association (MECA)
- ❖ Use authorities available to the county to regulate the use and development of water related land resources within incorporated areas when county standards are not met.
- ❖ Encourage open space/corridor management.
- ❖ Implement countywide erosion control plan; review and inspect on a fee-for-service basis.

#### **3. Rural stormwater management and non-point erosion and sedimentation**

- ❖ Promote and market conservation programs
  - 2002 USDA Farm Program
  - Cost share programs for Best Management Practices (BMP's)
  - Long term easements on marginal agriculture land
- ❖ Promote and demonstrate conservation tillage methods that are cost effective.
  - Especially in areas where hay production has decreased and corn and soybeans rotations have increased.

## **Department of Natural Resources – Scot Johnson**

### **1. Holding water on Landscapes**

- ❖ Implement agriculture BMP's to help:
  - Reduce flooding
  - Protect stream resources by reducing sediment in the Mississippi River
- ❖ Holding water on land will:
  - Improve groundwater recharge
  - Reduce flooding
  - Reduce stream bank erosion
  - Reduce nutrient and chemical loading
- ❖ Use agriculture management practices:
  - Plant buffer areas
  - Construct holding ponds
  - Contour farming and permanent vegetation cover (native veg.)

### **2. Groundwater Protection in Karst Areas**

- ❖ Protecting groundwater through BMP's ensures that water entering aquifers via sinkholes, infiltration, or subsurface streams is of high quality.
- ❖ Continue efforts with well sealing program
- ❖ Protect the Decorah edge recharge area.

### **3. Mississippi River Floodplain Management**

- ❖ Restore floodplains with native vegetation, floodplain forests and marshes through easements, acquisitions and other programs.
- ❖ Addition of Recreational Boating Management plan.

### **4. Trout Stream Protection**

- ❖ Agriculture BMP's well supply trout streams with cold clean groundwater.
- ❖ Buffer strips along rivers, seeps and sinkholes
- ❖ Divert warm stormwater from urban developments.
- ❖ Protect Bluff lands
  - Building setbacks
  - Erosion control requirements
  - Viewshed preservation
  - Vegetation provisions

**Minnesota Pollution Control Agency – Lisa Thorvig**

**1. Impaired Waters/Total Maximum Daily Load**

- ❖ Include maps of impaired waters
- ❖ Identify the pollutant(s) causing impairments
- ❖ Continue to submit data to MPCA to help identify waters and provide plans
- ❖ Timeline the county can follow to reduce pollutant(s)

**2. Erosion Control Stormwater Quality and Quantity**

- ❖ Address non-point pollution
  - Sediment and pollution loading from suburban, and agriculture erosion.
- ❖ Urban stormwater management
- ❖ Rural development
- ❖ Agriculture
- ❖ Protect high priority areas
  - Bluff land development
  - Critical habitat areas (trout streams)
- ❖ Increase corn and soybean residues on agricultural fields

**3. Land Use, Open Space Planning and Management**

- ❖ Prevent unwise development in sensitive areas
- ❖ Protect green space
- ❖ Zoning changes should reference new completed geologic atlas
- ❖ Tract nitrates in aquifers (Minnesota Department of Health)

**4. Stream Management and Riparian Areas Protection**

- ❖ Comprehensive monitoring on streams that are impaired
- ❖ Protect green space in riparian zones
- ❖ Education through MPCA Citizen Stream Monitoring Program
- ❖ MPCA developing a biobacteria to help evaluate stream conditions
- ❖ Site the Lower Mississippi River Basin Scoping Document.

**5. Stream Hydrograph Modifications**

- ❖ Attempt to “flatten” the “flashy” nature of hydrographs in smaller streams by using conservation practices.

**6. Targeted Wetland Restoration**

- ❖ Upland water retention and water filtration
  - Incorporate crop residues, and vegetated buffers

**7. Land Use Management Changes**

- ❖ Use Hydrograph and wetland retention to modify development and land use changes.

**The items listed below are recognized as concerns; however the priorities of these management issues are classified under more of a general category. All issues are a continuing effort to better the county's water resource:**

- ❖ Utilize environmental assessment tools when addressing problem areas of the county, such as:
  - Total Maximum Daily Load (TMDL)
  - Geologic Atlas
  - Natural Resource Inventory
  - County Biological Survey
- ❖ Protect and manage the Mississippi River
  - Floodplain vegetation
  - Marshes
  - Education
- ❖ Update Soil Survey
- ❖ Provide a list of all permits, to landowners, that pertains to feedlots and achieving compliance
- ❖ Provide Local Government Unit (LGU) with educational opportunities that discuss erosion control regulations and techniques through MPCA and/or MECA
- ❖ Increased education on the benefits of nutrient management plans.
- ❖ Continue to pursue the sealing of abandoned wells
- ❖ Continue to support the Goodhue County recycling efforts and improve the stenciling of catch basins along curb and gutters
- ❖ Support the Southeast Minnesota Wastewater Initiative in a regional effort to achieve septic compliance.
- ❖ Encourage county to adopt an ordinance to achieve septic system compliance
- ❖ Support the on going watershed efforts in the county
- ❖ Promote education to private well owners on ground water pollutants

**The following items are issues that are recognized as concerns for the Comprehensive Local Water Management Plan. Though important, they are not addressed in this updated version.**

A few minor issues that the state agencies had concerns with did not appear in the priority concern section. These were not mentioned because of on-going programs in the county which presently address those issues. For instance:

- ❖ City concerns which are covered under individual city plans
- ❖ Individual Sewage Treatment Systems (ISTS) programs and well code programs

The DNR requested that the Mississippi River requires increased management and preservation. The priority concerns that were ranked by the public achieve an overall common goal; to better the water resources of the county, including the Mississippi River. The MDNR requested that Recreational Boating Management Plan should be implemented on the Mississippi River along the shores of Goodhue County. However at

this time the residences of Goodhue County along with the policy committee, did not see this as being a priority concern, nor do we have the funds or personnel to implement such a program.

The remainder of the concerns from the state agencies, molded well with the ideas and expectations of the citizens of Goodhue County as well as the committee members.

**Attachments:** Meeting Attendees  
State/County Maps

## **ATTENDANCE:**

### **April 9<sup>th</sup>, 2001: Policy Committee Meeting**

Don Banks	Todd Arlander
Jim Bryant	Wally Gardner
Shelly Struss	Fred Huneke
Richard Ellingsberg	Dave Betcher
Matt Jacobson	

### **January 18<sup>th</sup>, 2002: Policy Committee Meeting**

Don Banks	Todd Arlander
Matt Jacobson	
Richard Ellingsberg	Sandra Olson
Shelly Struss	Jim Bryant
Wally Gardner	Fred Huneke
Dave Betcher	Denny Tebbe

### **November 21<sup>st</sup>, 2002: Joint Water Planning Meeting at Zumbro City Hall**

Glen Roberson	Justin Watkins	Phil Belfiori
Richard Samuelson	Scot Johnson	Matt Jacobson
Donald Banks	Todd Arlander	Sandy Olson
Tom Steger	Davie Betcher	Mary Kells
Bea Hoffmann	Wally Gardner	David Morrison
Nancy Spooner-Mueller	Richard Ellingsberg	
Willie Root	Steve Schmidt	

### **February 24<sup>th</sup>, 2003: Joint Water Planning Meeting at Zumbro City Hall**

Matt Jacobson	Willie Root	Todd Arlander
Glen Roberson	Sandra Olson	Nancy Spooner-Mueller
Jim Bryant	Don Banks	Scot Johnson
Fred Huneke	Bea Hoffmann	Denny Tebbe
Richard Ellingsberg	Pam Holst	Steve Schmidt
Tom Steger	Wally Gardner	David Morrison
Mary Kells		

### **July 21<sup>st</sup>, 2004: Technical Water Plan Committee Meeting at Goodhue SWCD**

Beau Kennedy	Nancy Spooner-Mueller
Mary Kells	Steve Schmidt
Glen Roberson	

**August 3<sup>rd</sup>, 2004: Technical Water Plan Committee at Goodhue SWCD**

Beau Kennedy	David Morrison	Scot Johnson
Mary Kells	Bob Samuelson	Glen Roberson
Chuck Schwartau	Bea Hoffmann	Willie Root
Steve Schmidt		

**August 11<sup>th</sup>, 2004: Water Plan Policy Committee at Goodhue SWCD**

Beau Kennedy	Richard Ellingsberg	Willie Root
Shelly Struss	Donald Banks	Sandra Olson
Justin Watkins		

**August 23<sup>rd</sup>, 2004: Policy Committee Meeting at Goodhue SWCD**

Beau Kennedy	Donald Banks	Shelly Struss
Richard Ellingsberg	Steve Schmidt	Glen Roberson
Gordon Cumming		

**September 7<sup>th</sup>, 2004: County Board Meeting at the Goodhue County Courthouse in Red Wing.**

Beau Kennedy	<b>County Commissioners</b>		
Glen Roberson	<b>Jim Bryant</b>	<b>Roseanne Grosso</b>	<b>Richard Samuelson</b>
Court Reporter: Andrea Benck	<b>Adm. David Hamilton</b>	<b>Ted Seifert</b>	<b>Robert Noah</b>

# **REALATED WEB LINKS MAPS, AND DIAGRAMS**



US Environmental Protection Agency (EPA): This site informs the average homeowner on what non-point source pollution is and how to attempt to control it. From this site, the rest of the EPA website is accessible and is very informative.

<http://www.epa.gov/owow/nps/whatis.html>

Met Council Website: This site contains information relating to water quality and quantity in control in the Metropolitan area. Many of the problems and solutions described on this site can be related to water quality issues in Goodhue County.

<http://www.metrocouncil.org/environment/environment.htm>

Board of Soil and Water Resources (BWSR): The BWSR website is full of information relating to wetlands, cost-sharing, permitting, conservation practices, technical services, legislative updates, and much more.

<http://www.bwsr.state.mn.us/>

Also, the BWSR put together a data matrix of contact numbers and websites for the public to use when questions or comments regarding water resources arise. The list is extensive and well put together.

<http://www.bwsr.state.mn.us/watermgmt/guidance/datamatrix.html>

Minnesota Pollution Control Agency (MPCA): This site is an information center like the BWSR site. Permits, educational opportunities, hot topics, regulatory material, etc which are related to water quality and quantity issues are located here.

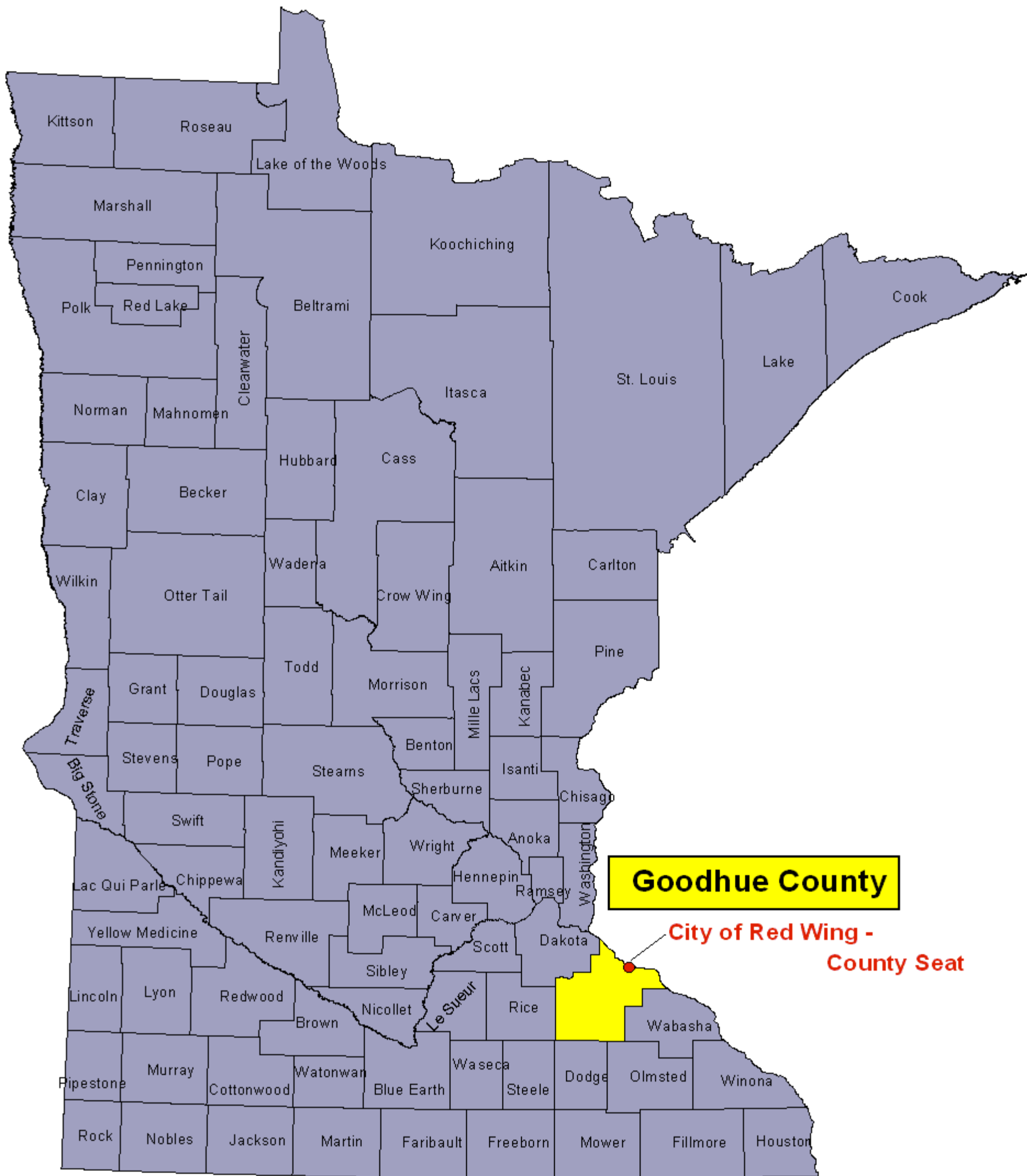
<http://www.pca.state.mn.us>

Minnesota Department of Natural Resources (MNDNR): This portion of the DNR website focuses on water resources. Items such as water resource data, water permit forms, statutes, educational material, legislative updates and various other programs which relate to water resources.

<http://www.dnr.state.mn.us/waters/index.html>

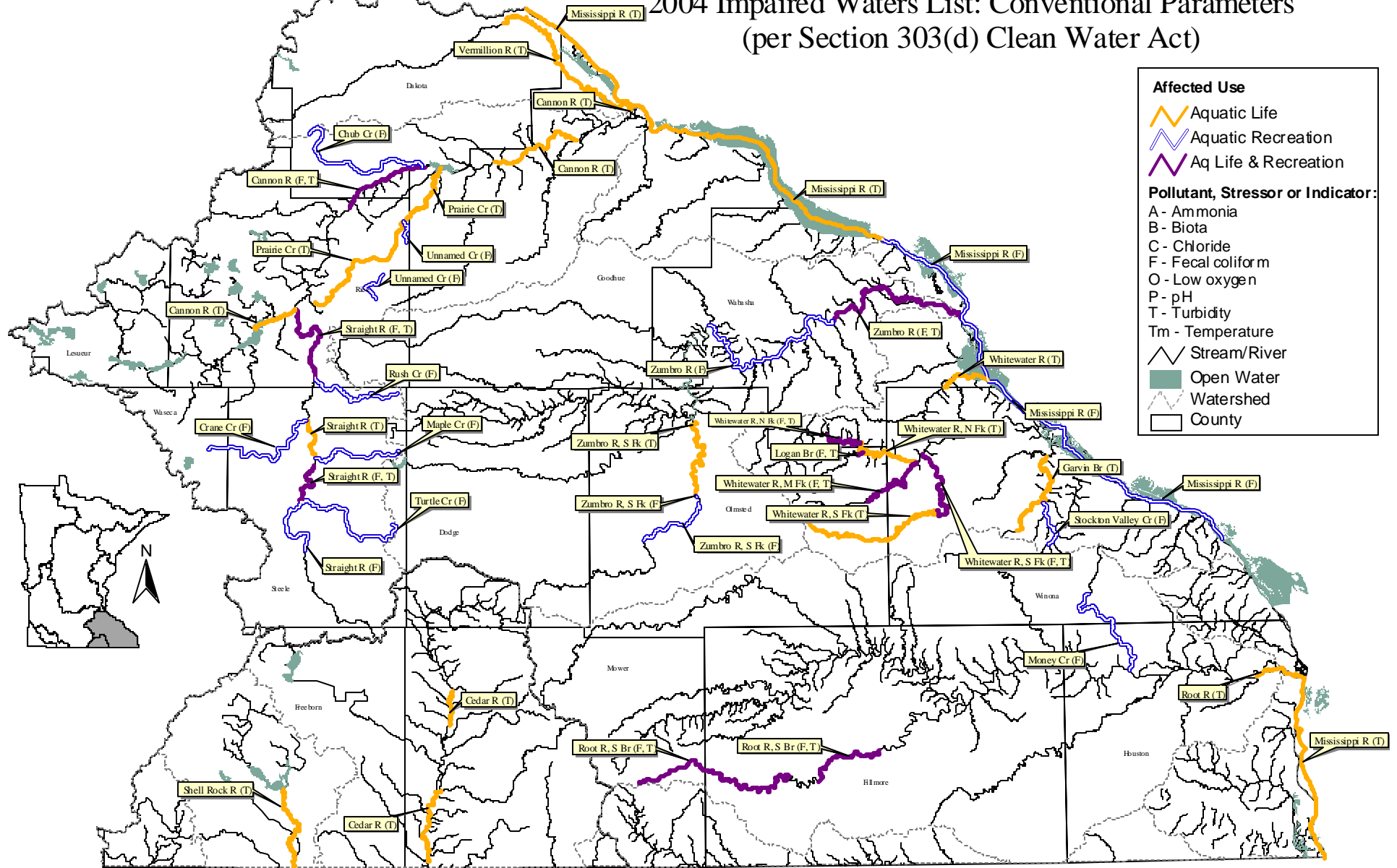
Goodhue County Website: <http://www.co.goodhue.mn.us/>

Goodhue County Soil and Water District: <http://www.goodhueswcd.org/>



# Mississippi River Basin: St. Croix River to Iowa Border and Cedar River Basin

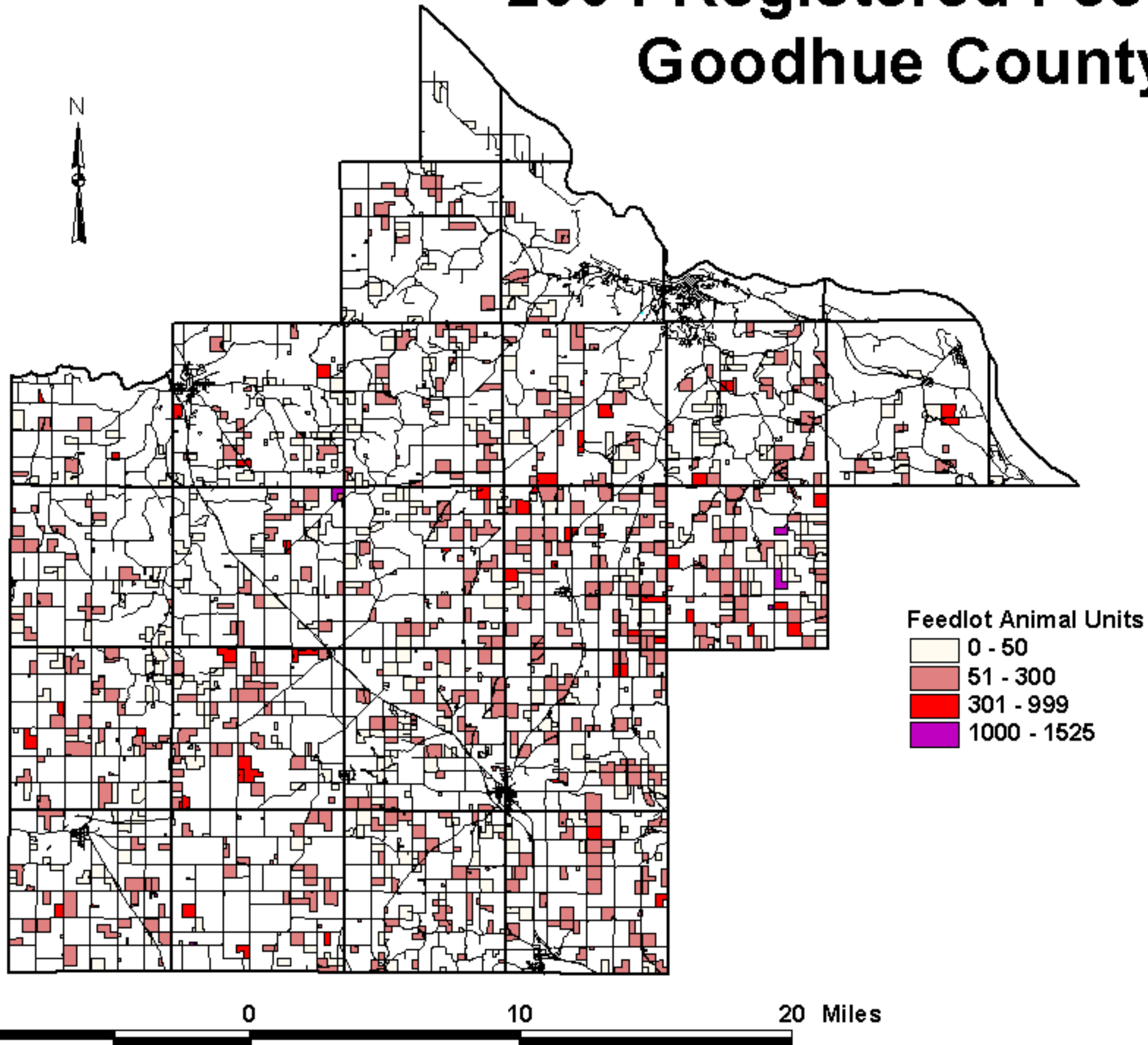
2004 Impaired Waters List: Conventional Parameters  
(per Section 303(d) Clean Water Act)



20 0 20 40 60 Miles

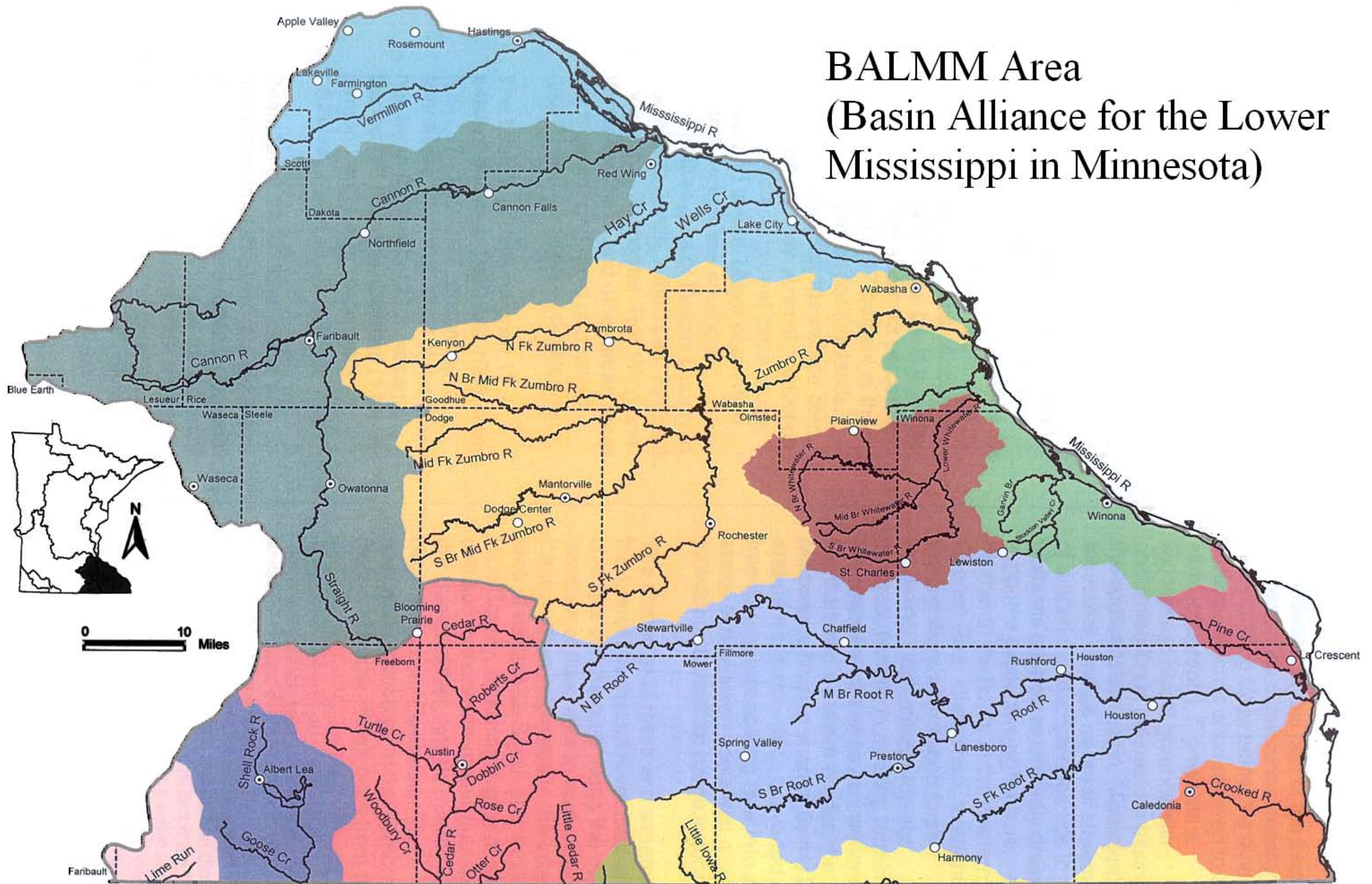
Reach <sup>14</sup>	Yr <sup>12</sup>	New <sup>9</sup>	Assessment Unit ID <sup>10</sup>	Prev AU ID <sup>13</sup>	DNR Lake #	Affected use	Pollutant or stressor <sup>3</sup>	Target start// completion <sup>7</sup>	Category <sup>14</sup>
<b>UPPER MISSISSIPPI RIVER BASIN, Lower Portion</b>									
Cannon River; Northfield Dam to Lk Bylesby inlet	04	New	07040002-509			Aquatic recreation	Fecal coliform	2004//2006	5A
Cannon River; Northfield Dam to Lk Bylesby inlet	98		07040002-509			Aquatic consumption	Mercury <sup>1</sup> FCA	1999//2011	5A
Cannon River; Northfield Dam to Lk Bylesby inlet	04	New	07040002-509			Aquatic life	Turbidity	2005//2009	5A
Cannon River; Pine Cr to Belle Cr	04	New	07040002-502			Aquatic life	Turbidity	2003//2009	5B
Cannon River; HUC boundary in Rice Lk Bottoms to Vermillion Slough/ Mississippi R	96		07040001-511			Aquatic life	Turbidity	2003//2009	5C
Mississippi River; St. Croix River to the Chippewa R (WI)	98		07040001-531	see <sup>16</sup>		Aquatic consumption	Mercury <sup>1</sup> FCA	1999//2011	5A
Mississippi River; St. Croix River to the Chippewa R (WI)	04	New	07040001-531	see <sup>16</sup>		Aquatic consumption	Mercury <sup>1</sup> Water Column	2004//2017	5A
Mississippi River; St. Croix River to the Chippewa R (WI)	98		07040001-531	see <sup>16</sup>		Aquatic consumption	PCB FCA	1999//2011	5A
Mississippi River; St. Croix River to the Chippewa R (WI)	98		07040001-531	see <sup>16</sup>		Aquatic life	Turbidity	2005//2009	5A
Prairie Creek; Headwaters to Cannon R (Lk Bylesby)	04	New	07040002-504			Aquatic life	Turbidity	2005//2009	5B
Vermillion River/Vermillion Slough; Hastings Dam to Mississippi R	98		07040001-504			Aquatic consumption	Mercury <sup>1</sup> FCA	1999//2011	5A
Vermillion River/Vermillion Slough; Hastings Dam to Mississippi R	98		07040001-504			Aquatic consumption	PCB FCA	1999//2011	5A
Vermillion River/Vermillion Slough; Hastings Dam to Mississippi R	94		07040001-504			Aquatic life	Turbidity	2003//2007	5A
Bylesby	02				19-0006	Aquatic recreation	Excess nutrients	2003//2007	5A
Bylesby	98				19-0006	Aquatic consumption	Mercury <sup>1</sup> FCA	1999//2011	5A
Pepin	02				25-0001	Aquatic recreation	Excess nutrients	2004//2009	5C

# 2004 Registered Feedlots Goodhue County

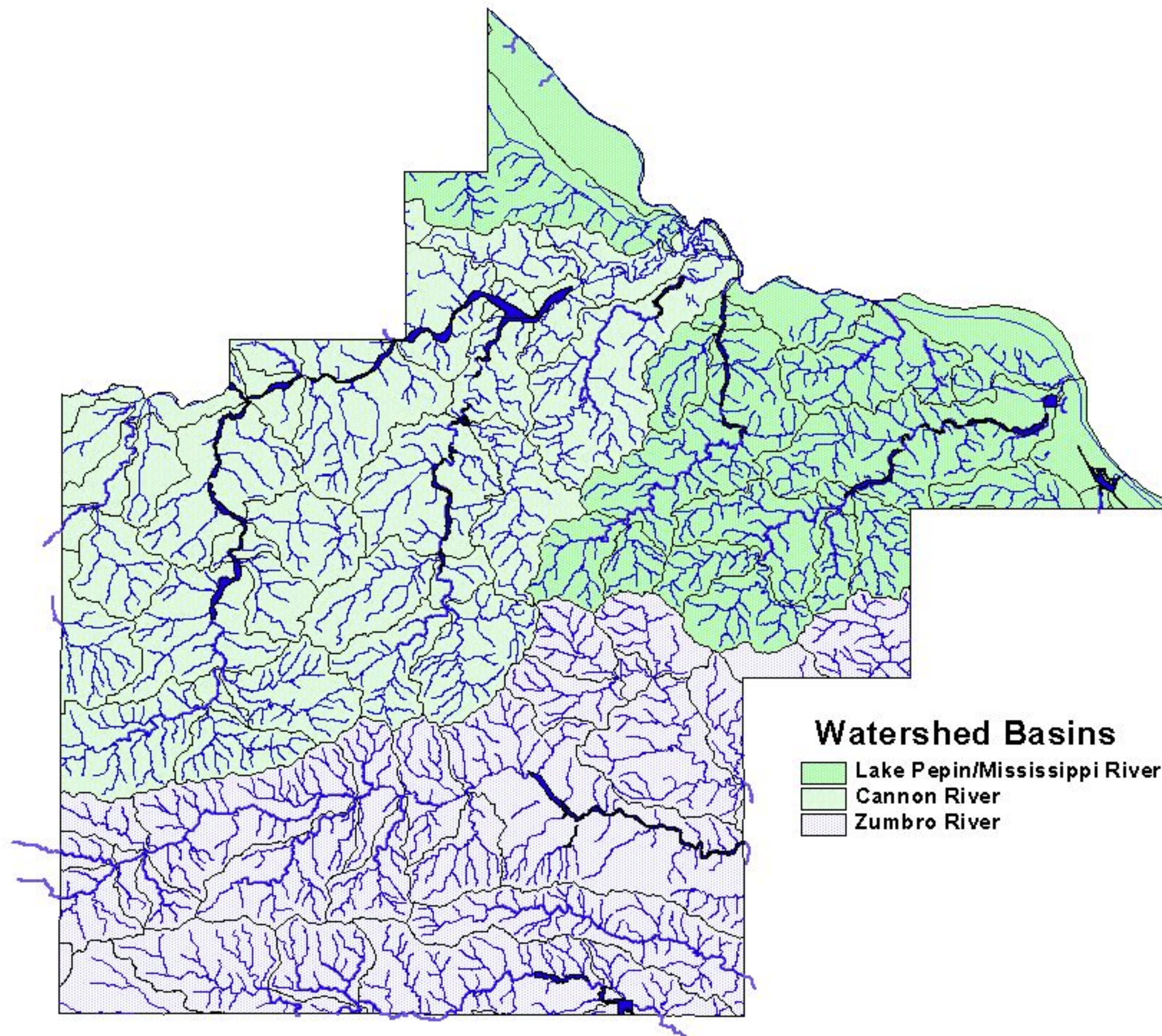




# BALMM Area (Basin Alliance for the Lower Mississippi in Minnesota)









# Goodhue County/Department of Agriculture Nitrate Testing Results : 1996 - 2003

